

MARKED-UP VERSION OF THE AMENDED CLAIMS

1. (currently amended) Device for inosculation of a hollow organ to the skin, of the type of device comprising a transparietal tube, ~~[[the]]~~ ends of which are attached to collars (6, 8) holding the tube, respectively, against the internal wall of the organ (intravisceral collar 8) and against the outside surface of the skin (skin collar 6), with the intravisceral collar (8) being ~~designed~~ constructed so that its shape can be changed by the practitioner to allow the intravisceral collar (8) to pass inside the organ directly from the outside of the patient's body, with the following characteristics:

The transparietal tube comprises at least two parts (2, 4), each attached to a collar respectively intravisceral (8) and skin (6), the said parts (2, 4) of the tube being fitted so that they are mobile for relative changes axial in position that are not spontaneously reversible, the said distal part (4) of the tube, attached to the intravisceral collar (8), comprising means of immobilisation (10, 12, 26) that can be used from the outside towards the inside of the tube to enable the practitioner to make the said changes in position; Such that the practitioner can adapt the length of the tube (2, 4), in both directions, according to the cumulated thickness of the fascia (1) of the

patient crossed, both at the time and after the tube (2, 4) is installed on the patient, and such that the variation in the length of the tube is taken up inside the thickness of the fascia (1) of the patient that it crosses;

2. (currently amended) Device according to claim 1, where ~~[[the]]~~ a shape of the intravisceral collar (8) can be changed by the practitioner by means of a pusher (16) that can be introduced inside the tube (2, 4), with the following characteristics:

The distal part (4) of the tube is specially designed to enable it to be gripped by the pusher (16) in order to render it immobile,

such that the practitioner can adapt the length of transparietal tube (2, 4) using the pusher (16) at least initially when the tube (2, 4) is installed on the patient;

3. (currently amended) Device according to claim 1, with the following characteristics:

The relative mobility between the two parts (2, 4) of the transparietal tube is obtained by screwing (26), with the distal part (4) of the tube being provided

with a non circular axial opening (18) that constitutes ~~the said~~ a nesting organ, in order for it to be rendered immobile in the rotational direction by the practitioner using a specific tool (16), that can be introduced inside the said axial opening (18) and that comprises at least one area of complementary cross-section [[:]] .

4. (currently amended) Device according to claim 2, with the following characteristics:

- The pusher (16) comprises between its two ends a non circular section designed to traverse the axial opening (18) of complementary shape in the distal part ~~[[(6)]]~~ (4), in order to render the ~~latter (6)~~ the distal part (4) immobile in the rotational direction;

5. (previously presented) Device according to claim 1, with the following characteristics:

The transpariental tube (2, 4) is "telescopic" and comprises at least two end parts (2, 4) making up the said distal (4) and proximal (2) parts of the tube;

6. (previously presented) Device according to claim 5, with the following characteristics:

the distal (4) and proximal (2) parts of the tube are connected one to the other by screwing (26);

7. (previously presented) Device according to claim 1, with the following characteristics:

the relative mobility between the parts (2, 4) of the tube is obtained by the parts (2, 4) sliding axially one relative to the other, with the distal part (4) of the tube being rendered immobile by means of a "bayonet" device (10, 12), with slots (10) being provided in the distal part (4) of the tube in order to allow the latter to be gripped by a specific tool (14) provided with lugs (12).

8. (new) A device for inosculation of a hollow organ to the skin, comprising a first part (2) of a transparietal tube having a first end and a second end; a second part (4) of the transparietal tube having a first end and a second end;

a skin collar (6) attached to and holding the first end of the first part (2) of the transparietal tube against an outside surface of a skin;

a intravisceral collar (8) attached to and holding the first end of the second part (4) of the transparietal tube against an internal wall of the hollow organ, wherein the intravisceral collar (8) is constructed such that a shape of the intravisceral collar (8) is changeable by the practitioner to allow the intravisceral collar (8) to pass inside the organ directly from the outside of the patient's body:

wherein the first part (2) of the transparietal tube and the second part (4) of the transparietal tube are fitted so that they are mobile axial for relative changes in position that are not spontaneously reversible, wherein the second part (4) of the tube is attached to the intravisceral collar (8);

an adjustment arrangement (10, 12, 26) that engageable from the outside towards the inside of the transparietal tube to enable a practitioner to make changes of a relative position of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such as to enable the practitioner to increase or to decrease a length of the transparietal tube according to a cumulated thickness of a fascia (1) of a patient crossed, both at a time of installation of the parietal tube and after the parietal tube has

been installed on the patient, and wherein a change in the length of the parietal tube is taken up inside the thickness of the fascia (1) of the patient crossed by the parietal tube.

9. (new) The device according to claim 8, wherein a shape of the intravisceral collar (8) is changeable by the practitioner by means of a pusher (16), wherein the pusher is introduceable inside the transparietal tube, wherein the second part (4) of the transparietal tube is constructed to enable the transparietal tube to be gripped by the pusher (16) in order to render the transparietal tube immobile for allowing the practitioner to adapt the length of transparietal tube using the pusher (16) at least initially when the transparietal tube is installed on the patient.

10. (new) The device according to claim 8, wherein a relative mobility between the first part (2) of the transparietal tube and the second part (4) of the transparietal tube is obtained by screwing (26), wherein the second part (4) of the transparietal tube is furnished with a non circular axial opening (18) that constitutes a nesting organ, in order for the transparietal tube to be

rendered immobile in a rotational direction by the practitioner using a pusher (16), which pusher (16) can be introduced inside the said axial opening (18) and which pusher comprises at least one area of complementary cross-section.

11. (new) The device according to claim 9, wherein: the pusher (16) comprises a non circular section between two ends of the pusher (16), wherein the non-circular section is constructed to traverse an axial opening (18) of complementary shape in the second part (4) of the transparietal tube, in order to render the second part (4) of the transparietal tube immobile in a rotational direction.

12. (new) The device according to claim 8, wherein the transparietal tube is "telescopic" and comprises the first part (2) and the second part (4) making up a proximal part (2) and a distal part (4) of the transparietal tube.

13. (new) The device according to claim 12, wherein the distal part (4) and the proximal part (2) of the transparietal tube are connected one to the other by screwing (26).

14. (new) The device according to claim 8, wherein a relative mobility between the first part (2) of the transparietal tube and the second part (4) of the transparietal tube is obtained by the first part (2) of the transparietal tube and the second part (4) of the transparietal tube (4) sliding axially one relative to the other, wherein the second part (4) of the transparietal tube is rendered immobile by means of a "bayonet" device (10, 12), and wherein slots (10) are furnished in the second part (4) of the transparietal tube in order to allow the transparietal tube to be gripped by a specific tool (14) provided with lugs (12)

15. (new) A device for inosculation of a hollow organ to the skin, comprising a first part (2) of a transparietal tube having a first end and a second end; a second part (4) of the transparietal tube having a first end and a second end, wherein the first part (2) of the transparietal tube and the

second part (4) of the transparietal tube are fitted to each other for allowing to induce a relative shifting in an axial direction of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such that the shifting is not spontaneously reversible;

a skin collar (6) attached to and holding the first end of the first part (2) of the transparietal tube against an outside surface of a skin;

a intravisceral collar (8) attached to and holding the first end of the second part (4) of the transparietal tube against the internal wall of a hollow organ, wherein the intravisceral collar (8) is constructed such that a shape of the intravisceral collar (8) is elastically deformable to allow the intravisceral collar (8) to pass inside the hollow organ directly from an outside of a patient's body:

a bayonet device (10, 12) having slots (10) furnished on the second part (4) of the transparietal tube, wherein the bayonet device (10, 12) is engageable from the outside towards the inside of the transparietal tube to enable a making of changes of a relative position of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such as to enable an increase or a decrease a length of the transparietal tube according to a cumulated thickness of a fascia (1) of a patient crossed, both

at a time of installation of the parietal tube and after the parietal tube has been installed on the patient, and wherein a change in the length of the parietal tube is taken up inside the thickness of the fascia (1) of the patient crossed by the parietal tube.

16. (new) The device according to claim 15, wherein the intravisceral collar (8) is shaped like an elastic bottle, wherein the shape of the elastic bottle is changeable by means of a pusher (16), wherein the pusher is introduceable inside the transparietal tube, wherein the second part (4) of the transparietal tube is constructed to enable the transparietal tube to be gripped by the pusher (16) in order to render the transparietal tube immobile for allowing the practitioner to adapt the length of transparietal tube using the pusher (16) at least initially when the transparietal tube is installed on the patient.

17.(new) The device according to claim 16 further comprising a noncircular axial opening (18) disposed in the second part (4) of the transparietal tube, wherein: the pusher (16) comprises a non circular section between two ends of the pusher (16), wherein the non-circular section is constructed to

traverse the axial opening (18) of complementary shape in the second part (4) of the transparietal tube, in order to render the second part (4) of the transparietal tube immobile in a rotational direction.

18. (new) The device according to claim 15, further comprising slots (10) furnished in the second part (4) of the transparietal tube in order to allow the transparietal tube to be gripped by a specific tool (14) provided with lugs (12), wherein a relative mobility between the first part (2) of the transparietal tube and the second part (4) of the transparietal tube is obtained by the first part (2) of the transparietal tube and the second part (4) of the transparietal tube (4) sliding axially one relative to the other, wherein the second part (4) of the transparietal tube is rendered immobile by means of the "bayonet" device (10, 12),.

19. (new) The device according to claim 15, further comprising an intermediate part (20) of the transparietal tube disposed between the first part of the transparietal tube and the second part (4) of the transparietal tube.

20. (new) A device for inosculation of a hollow organ to the skin,
comprising

a first part (2) of a transparietal tube having a first end and a second end;

a second part (4) of the transparietal tube having a first end and a second end, wherein the first part (2) of the transparietal tube and the second part (4) of the transparietal tube are fitted to each other for allowing to induce a relative shifting in an axial direction of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such that the shifting is not spontaneously reversible;

a skin collar (6) attached to and holding the first end of the first part (2) of the transparietal tube against an outside surface of a skin;

a intravisceral collar (8) attached to and holding the first end of the second part (4) of the transparietal tube against the internal wall of a hollow organ, wherein the intravisceral collar (8) is constructed such that a shape of the intravisceral collar (8) is elastically deformable to allow the intravisceral collar (8) to pass inside the hollow organ directly from an outside of a patient's body:

a screw connection and tapping (26) furnished on the first part (2) of the transparietal tube and on the second part (4) of the transparietal tube,

wherein the screw connection (26) is engageable from the outside towards the inside of the transparietal tube to enable a making of changes of a relative position of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such as to enable an increase or a decrease a length of the transparietal tube according to a cumulated thickness of a fascia (1) of a patient crossed, both at a time of installation of the parietal tube and after the parietal tube has been installed on the patient, and wherein a change in the length of the parietal tube is taken up inside the thickness of the fascia (1) of the patient crossed by the parietal tube.

21. (new) The device according to claim 20, wherein a relative mobility between the first part (2) of the transparietal tube and the second part (4) of the transparietal tube is obtained by screwing the screw connection and tapping (26), wherein the second part (4) of the transparietal tube is furnished with a non circular axial opening (18) that constitutes a nesting organ, in order for the transparietal tube to be rendered immobile in a rotational direction by the practitioner using a pusher (16), which pusher (16) can be introduced inside the said non circular axial opening (18) and which pusher comprises at least one area of complementary cross-section.

22. (new) The device according to claim 20 further comprising a spontaneously closing valve (22) disposed on the first end of the second part (4) of the transparietal tube;
a movable shutter disposed on the first end of the first part (4) of the transparietal tube;

23. (new) A kit for inosculation of a hollow organ to the skin, comprising
a first part (2) of a transparietal tube having a first end and a second end;
a second part (4) of the transparietal tube having a first end and a second end, wherein the first part (2) of the transparietal tube and the second part (4) of the transparietal tube are fitted to each other for allowing to induce a relative shifting in an axial direction of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such that the shifting is not spontaneously reversible;
a skin collar (6) attached to and holding the first end of the first part (2) of the transparietal tube against an outside surface of a skin;
an intravisceral collar (8) attached to and holding the first end of the second part (4) of the transparietal tube against the internal wall of a hollow organ,

wherein the intravisceral collar (8) is constructed such that a shape of the intravisceral collar (8) is elastically deformable to allow the intravisceral collar (8) to pass inside the hollow organ directly from an outside of a patient's body:

an axial opening (18) having a non circular section and disposed in the second part (4) of the transparietal tube;

a pusher (16) having a first end and having a second end and including a non circular section between the first end and the second end of the pusher (16), wherein the non-circular section is constructed to traverse the axial opening (18) of complementary shape in the second part (4) of the transparietal tube, in order to render the second part (4) of the transparietal tube immobile in a rotational direction, wherein a shape of the intravisceral collar (8) is changeable by means of the pusher (16), wherein the pusher is introduceable inside the transparietal tube, wherein the second part (4) of the transparietal tube is constructed to enable the transparietal tube to be gripped by the pusher (16) in order to render the transparietal tube immobile for allowing to adapt the length of transparietal tube using the pusher (16) at least initially when the transparietal tube is installed on the patient;

a screw connection and tapping (26) furnished on the first part (2) of the transparietal tube and on the second part (4) of the transparietal tube, wherein the screw connection (26) is engageable from the outside towards the inside of the transparietal tube to enable a making of changes of a relative position of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such as to enable an increase or a decrease a length of the transparietal tube according to a cumulated thickness of a fascia (1) of a patient crossed, both at a time of installation of the parietal tube and after the parietal tube has been installed on the patient, and wherein a change in the length of the parietal tube is taken up inside the thickness of the fascia (1) of the patient crossed by the parietal tube.

24. (new) A method for inosculating of a hollow organ to the skin, comprising the following steps:

furnishing a first part (2) of a transparietal tube having a first end and a second end;

furnishing a second part (4) of the transparietal tube having a first end and a second end;

fitting the first part (2) of the transparietal tube and the second part (4) of the transparietal tube to each other for allowing to induce a relative shifting in an axial direction of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such that the shifting is not spontaneously reversible;

attaching a skin collar (6) to and holding the first end of the first part (2) of the transparietal tube against an outside surface of a skin;

attaching an intravisceral collar (8) to and holding the first end of the second part (4) of the transparietal tube against the internal wall of a hollow organ, wherein the intravisceral collar (8) is constructed such that a shape of the intravisceral collar (8) is elastically deformable to allow the intravisceral collar (8) to pass inside the hollow organ directly from an outside of a patient's body:

installing the transparietal tube on the patient;
furnishing an axial opening (18) having a non circular section in the second part (4) of the transparietal tube;

furnishing a pusher (16) having a first end and having a second end;

including a non circular section between the first end and the second end of the pusher (16);

constructing the non-circular section to be able to traverse the axial opening (18) of complementary shape in the second part (4) of the transparietal tube, in order to render the second part (4) of the transparietal tube immobile in a rotational direction;

introducing the pusher (16) inside the transparietal tube;

changing a shape of the intravisceral collar (8) by means of the pusher (16);

constructing the second part (4) of the transparietal tube to enable the transparietal tube to be gripped by the pusher (16);

gripping the transparietal tube with the pusher;

rendering the transparietal tube immobile for allowing to adapt the length of transparietal tube using the pusher (16);

furnishing a screw connection and tapping (26) on the first part (2) of the transparietal tube and on the second part (4) of the transparietal tube;

engaging the screw connection (26) from the outside towards the inside of the transparietal tube;

screwing the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube;

making of changes of a relative position of the first part (2) of the transparietal tube relative to the second part (4) of the transparietal tube such

as to enable an increase or a decrease a length of the transparietal tube according to a cumulated thickness of a fascia (1) of a patient crossed, both at a time of installation of the parietal tube and after the parietal tube has been installed on the patient;

taking up a change in the length of the parietal tube inside the thickness of the fascia (1) of the patient crossed by the parietal tube.

25. (new) The method for inosculating of a hollow organ to the skin, according to claim 24 further comprising the following steps:

furnishing the first part (2) of the transparietal tube telescopic relative to the second part (4) of the transparietal tube;

obtaining immobilization of the second part (4) of the transparietal tube by means of the pusher (16);

pushing the intravisceral collar (8) out of shape when installing the transparietal tube on the patient;

26. (new) The method for inosculating of a hollow organ to the skin, according to claim 24 further comprising the following steps:

furnishing a spontaneous closing valve (22) disposed on a first end of the second part (4) of the transparietal tube;

moving a movable shutter (24) disposed at the first end of the first part of the transparietal tube;

forming the intravisceral collar (8) as a hollow body;

furnishing lateral openings (28) to the hollow body;

gripping the skin collar (6) from the outside;

immobilizing the first part (2) of the transparietal tube.